APPARATUS AND METHOD FOR TOPOGRAPHY DEPENDENT SIGNALING ABSTRACT OF THE DISCLOSURE

Bus communications are optimized by adjusting signal characteristics in accordance with one or more topography dependent parameters. In a bus transmitter, a transmit signal characteristic is adjusted in accordance with a topography dependent parameter. A port in the bus transmitter receives the topography dependent parameter for later use by the parameter adjustment circuitry. The parameter adjustment circuitry adjusts a parameter control signal in accordance with the topography dependent parameter, which is coupled to the output driver. Prior to driving an output signal onto a bus, the output driver adjusts the transmit signal characteristic in accordance with the parameter control signal. Similarly, in a bus receiver, a receive signal characteristic is adjusted in response to a topography dependent parameter.